

Middlebury District Office

2014 Behavioral Risk Factor Surveillance System Data

Guidance • Support • Prevention • Protection

VDH – Public Health Statistics
May 2016

 **VERMONT**
DEPARTMENT OF HEALTH

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What is the Behavioral Risk Factor Surveillance System or BRFSS?

The Behavioral Risk Factor Surveillance System (BRFSS) is a telephone survey conducted annually among adults 18 and older. The Vermont BRFSS is conducted by the Vermont Department of Health (VDH) in collaboration with the Centers for Disease Control and Prevention (CDC). All U.S. states, Washington D.C. and several U.S. territories participate in the survey.

Typically between 6,000 and 7,000 Vermont adults are interviewed as part of the Vermont BRFSS each year. Vermont residents ages 18 and older are eligible for the survey. A Vermont resident is defined as someone living in the state for at least 30 days in a given calendar year. Adults living in institutions such as nursing homes, group homes, or prisons are not eligible for the survey.

The BRFSS survey includes questions on chronic disease prevalence (e.g. asthma diagnosis), risk behaviors (e.g. currently smoke), demographics (e.g. age, gender, race), health care access (e.g. have health insurance), and preventive behaviors and health screening (e.g. routine visits to a doctor or colorectal cancer screening).

Additional information can be found on the VDH and CDC websites:

- <http://healthvermont.gov/research/brfss.aspx>
- <http://www.cdc.gov/brfss/>

A report summarizing the 2014 statewide results from the Vermont BRFSS can also be found on the VDH website:

http://healthvermont.gov/research/brfss/documents/summary_brfss_2014.pdf

Recent Changes to BRFSS Methodology

In 2011, the CDC implemented changes to the BRFSS weighting methodology in order to more accurately represent the adult population. Population weights are now calculated using iterative proportional fitting (or “raking”) methodology. This allows the weights to be calculated using smaller sample sizes, adjusts for more demographic variables, and incorporates cell phone interview data into estimates.

While these adjustments make the calculations more representative of the population, the changes in methodology also limit the ability to compare 2011 results to previous years. VDH’s Center for Health Statistics recommends that comparisons between 2011 BRFSS data and earlier years be made with caution. Statistical differences between 2011 and earlier years May be due to methodological changes, rather than changes in opinion or behavior.

Demographics of Middlebury District Office*

The next few pages describe the demographic makeup of Middlebury area adults in 2013-2014.

More than half of Middlebury adults are female (52%). Two-thirds of adult Middlebury residents are 25-64, with over one in five being 65 and older (22%).

- Middlebury area adults report a similar age distribution to Vermont adults overall.

Three in ten Middlebury area adults has a college degree or higher, while four in ten has a high school degree or less.

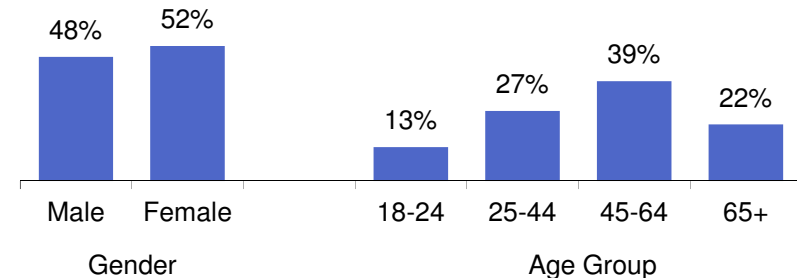
- Middlebury area adults report a similar education distribution to Vermont adults overall.

Half of Middlebury adults lives in a home making \$50,000 or more annually.

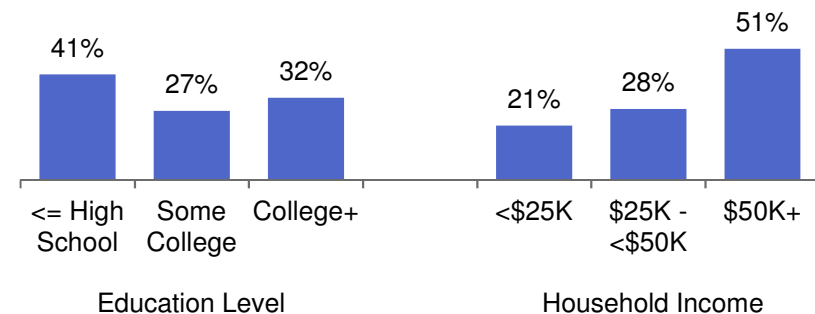
- There are no statistical differences between Middlebury adults and Vermont adults overall by annual income level.

Four percent of adults in the Middlebury area and six percent of Vermont adults overall report being a racial or ethnic minority.

**Middlebury Residents
by Gender and Age**



**Middlebury Residents
by Education & Income Level**



*See page 31 for a list of the towns included in the Middlebury Health District.

Demographics of Middlebury District Office

Two thirds (67%) of Middlebury adult residents are currently employed, 17% are retired. Eight percent said they are a student or homemaker, and four percent each said they are unemployed or unable to work.

- Middlebury area adults reported a similar employment distribution to Vermont adults overall.

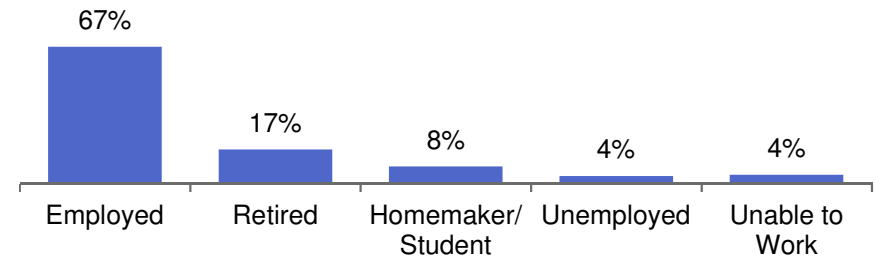
About six in ten (59%) Middlebury adults are married. Seventeen percent have never married, while 13% are divorced. Seven percent or fewer each are widowed or part of an unmarried couple.

- Middlebury adults are significantly more likely to be married (59% vs. 53%), and less likely to have never married (17% vs. 23%), as compared with Vermont adults overall.

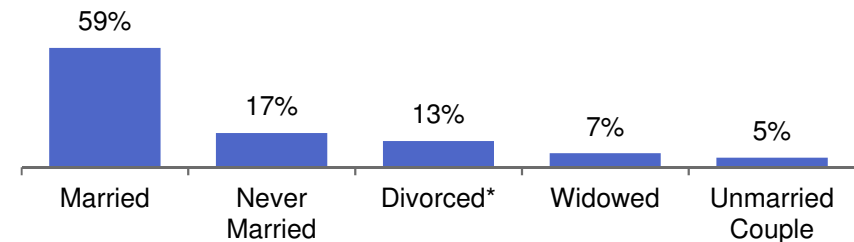
Two-thirds (67%) of adults in the Middlebury area said there are no children less than 18 in their home. Five percent reported having three or more children.

- The number of children in the home reported by Middlebury area adults was similar to that for Vermont overall.

**Middlebury Residents
by Employment Status**

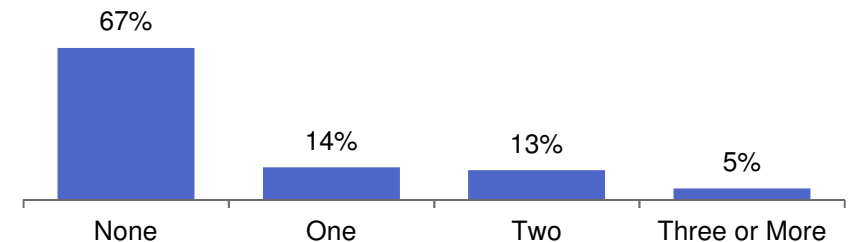


**Middlebury Residents
by Marital Status**



*Includes those who reported their marital status as divorced or separated.

**Middlebury Residents
by Children in Household**



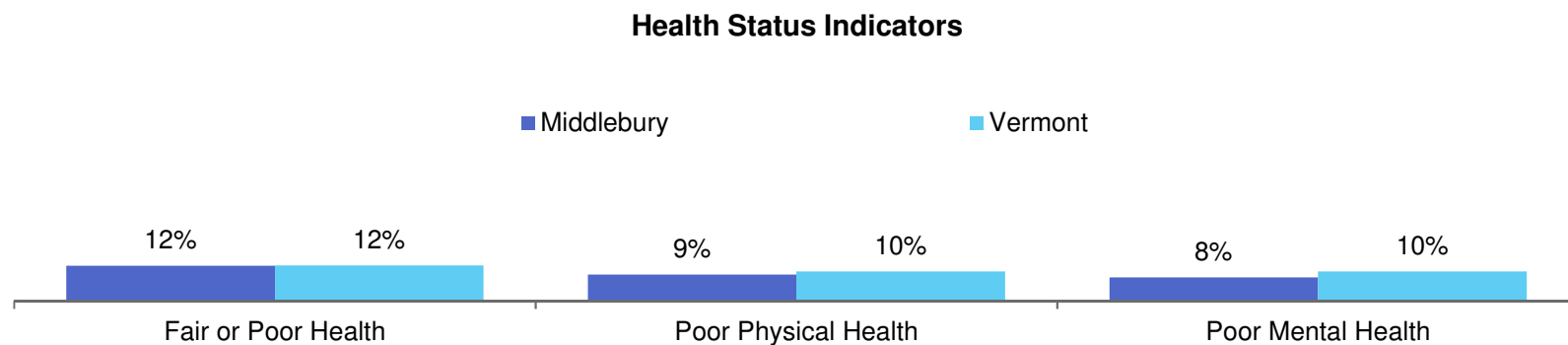
Health Status Indicators

In 2013-2014, one in eight Middlebury area adults reported being in fair or poor general health. Slightly fewer, one in eleven reported having poor physical health, while eight percent said they had poor mental health.

- Poor mental and physical health were defined as 14 or more days of poor mental/physical health in the last month.

There are no statistically significant differences in health status, regardless of the measure, when comparing Middlebury area adults and Vermont adults overall.

Among adults in the Middlebury area, health status indicators have not changed significantly since 2011. See Appendix A for results over time.



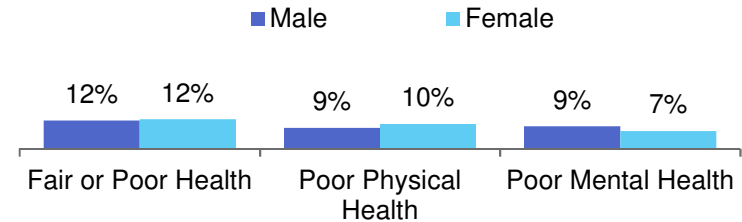
Health Status Indicators

Rates of fair or poor general health, poor physical health and poor mental health among Middlebury area adults do not differ significantly by gender or age.

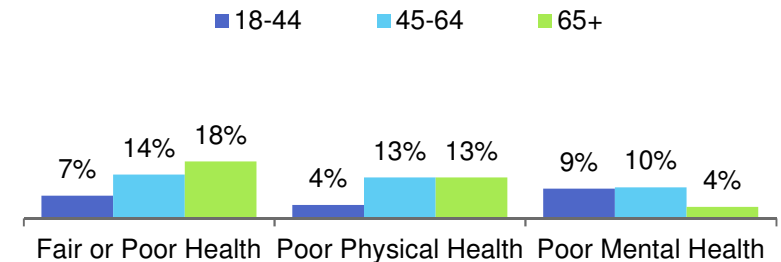
Middlebury adults with low annual incomes are more likely to have poor health.

- Adults in homes making less than \$25,000 per year are more likely than those in homes making at least \$50,000 to report poor physical health.
- Those in homes making less than \$25,000 and \$50,000 and more are more likely to have poor mental health than those making \$25,000 - \$49,999.

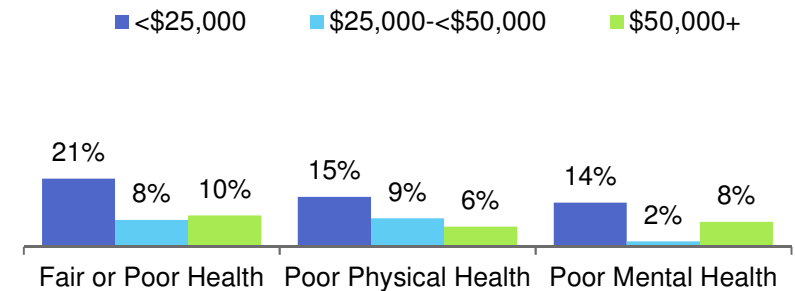
**Health Status Indicators by Gender
Middlebury Adults**



Health Status Indicators by Age



Health Status Indicators by Income Level

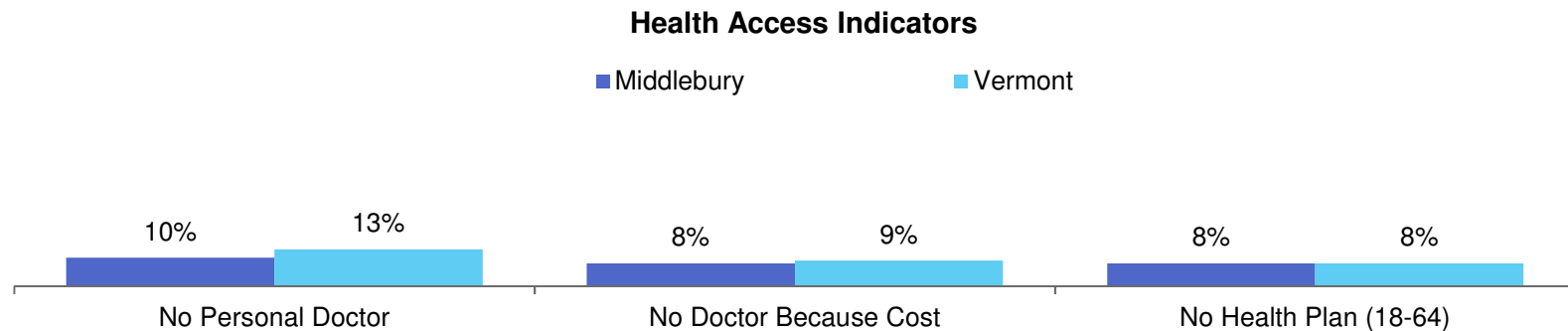


Health Access Indicators

In 2013-2014, one in ten adults in the Middlebury area said they do not have a personal doctor for health care. Fewer, one in twelve said they needed care in the last year but did not seek it due to the cost. Among Middlebury area adults ages 18-64, eight percent said they do not have health insurance.

There are no differences in health care access, regardless of the measure, when comparing Middlebury area adults and Vermonters overall.

Additionally, among Middlebury area adults, health access indicators have not changed significantly since 2011. See Appendix A for results over time.



Health Access Indicators

There are no statistically significant differences in health care access measures by gender, among Middlebury area adults.

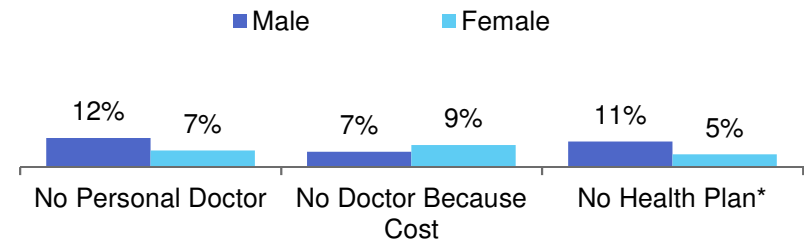
Poor health care access decreases with increasing age.

- Middlebury adults 18-64 are significantly more likely than those 65 and older to not have a personal doctor.
- Adults 18-44 are also more likely to not have a health plan compared to those 45-64 years old.
- There are no significant differences in delaying a visit to a doctor because of cost.

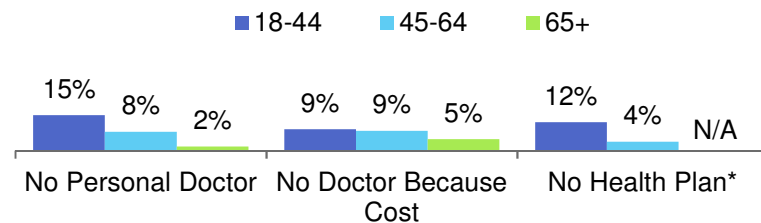
Poor health care access also decreases as annual household income increases.

- Middlebury area adults with an annual household income of at least \$50,000 are significantly more likely to have a health plan than those in homes making less than \$25,000 annually.
- There are no statistical differences by income level in not having a personal doctor and delaying care due to cost.

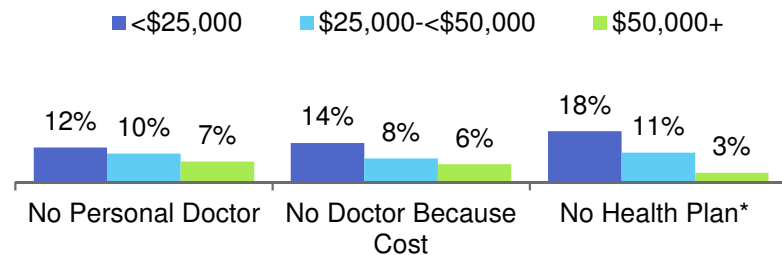
**Health Access Indicators by Gender
Middlebury Adults**



Health Access Indicators by Age



Health Access Indicators by Income Level



*Limited to adults 18-64.

Disability

Less than a quarter of Vermont adults reported having a disability (24%) in 2014. This is statistically similar to the 23% reported among adults in the Middlebury area.

- Disability was defined as having activity limitations due to physical, emotional or mental problems OR any health problem that requires use of special equipment.

Men and women in the Middlebury area report being disabled at statistically similar rates.

Reported disability among Middlebury adults increases with increasing age.

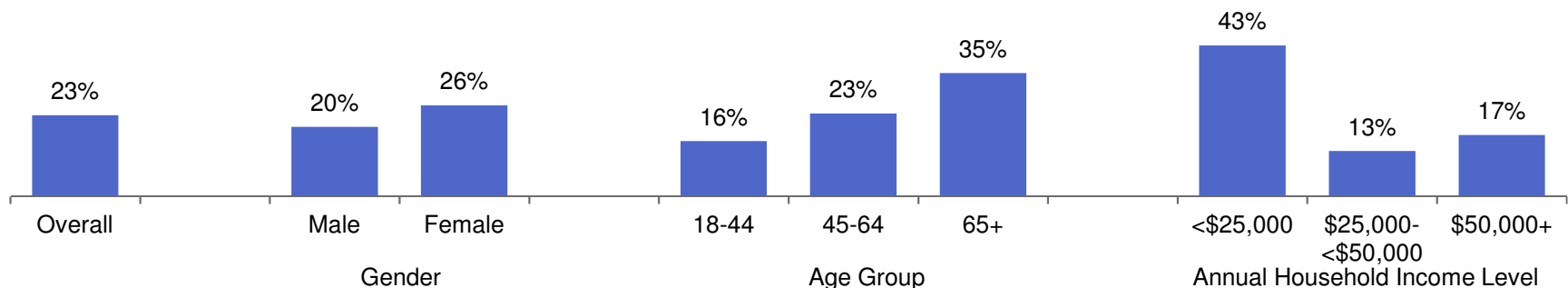
- Adults older than 65 years are more likely to have a disability than adults 18-44.

Middlebury area adults in homes with lower annual household incomes are more likely to be disabled.

- Adults in homes making less than \$25,000 annually are significantly more likely to report disability than those in homes with more income.

While reported disability among Middlebury area adults has decreased since 2011, the change is not statistically significant. See Appendix A for results over time.

**Disability, Overall and by Sub-groups
Middlebury Adults**



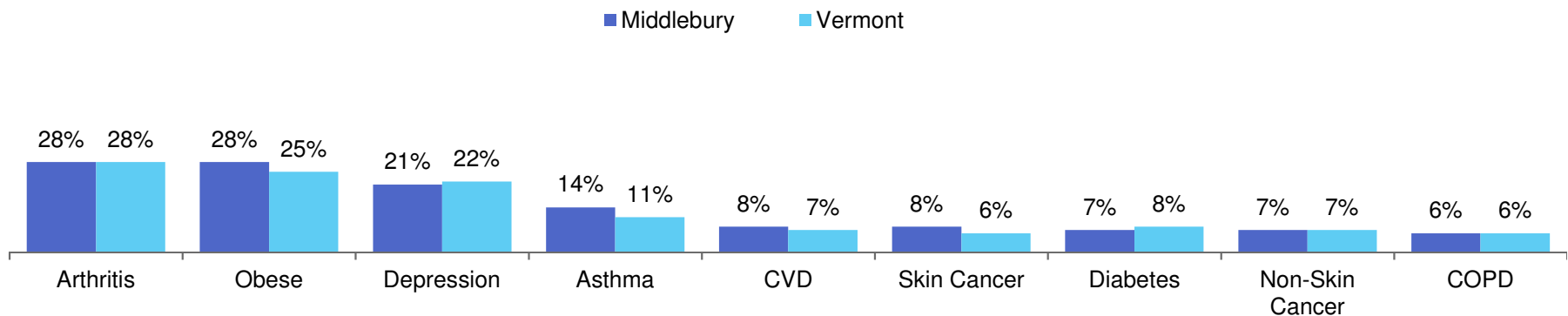
Chronic Conditions

Slightly less than three in ten Middlebury area adults said they have ever been diagnosed with arthritis. The same proportion are obese, while about one in five (21%) has a depressive disorder.

One in seven (14%) Middlebury area adults have asthma and less than one in ten has been diagnosed with the following: cardiovascular disease (CVD), skin cancer, diabetes, non-skin cancer, and chronic obstructive pulmonary disease (COPD).

Middlebury area adults report similar chronic disease prevalence's to Vermont overall, regardless of the measure. Additionally, the prevalence of all reported chronic conditions have not changed significantly since 2011. See Appendix A for trend results.

Prevalence of Selected Chronic Conditions



CVD = cardiovascular disease.

Obesity data is limited to adults 20 and older and is age-adjusted to the U.S. 2000 population.

Chronic Conditions

The prevalence of arthritis, asthma and obesity do not vary significantly by gender.

Among Middlebury area adults, women are significantly more likely to report a depressive disorder than males (28% vs. 14%).

Arthritis prevalence among Middlebury adults increases with increasing age.

- All differences in arthritis prevalence by age are statistically significant.

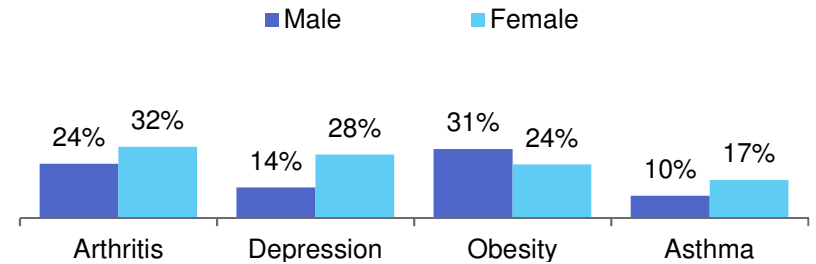
Middlebury adults ages 45-64 are significantly more likely to report a depressive disorder than older adults.

There are no differences in the prevalence of obesity and asthma by age.

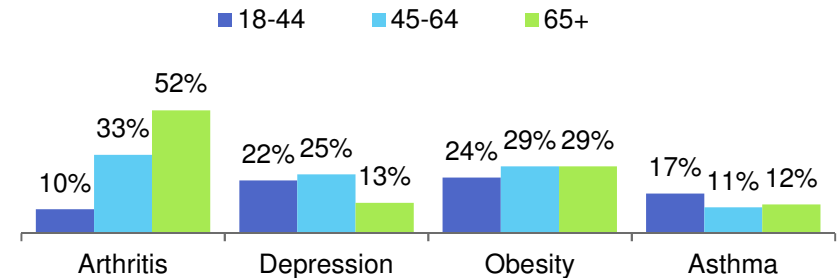
Middlebury area adults with lower incomes are more likely to report obesity.

- Those in homes making less than \$25,000 are more likely to be obese compared to those in homes with incomes greater than \$50,000.
- There are no statistical differences in reported rates of arthritis, depressive disorders, and asthma by annual household income.

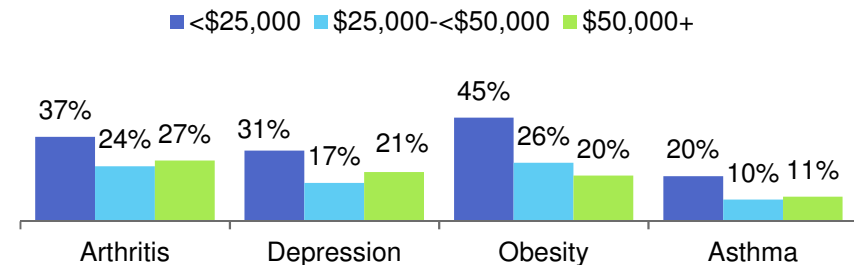
**Chronic Conditions by Gender
Middlebury Adults**



Chronic Conditions by Age



Chronic Conditions by Income Level



Note: Obesity data are for adults 20 and older and, except that for age, are age adjusted to U.S. 2000 standard population.

Chronic Conditions

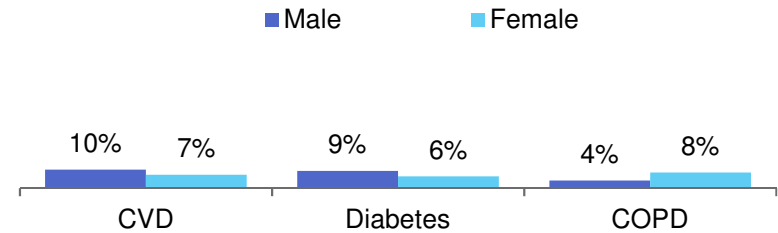
There are no statistically significant differences in the prevalence of cardiovascular disease, diabetes, and COPD by gender.

Reported cardiovascular disease, diabetes and COPD among Middlebury area adults all increase as age increases.

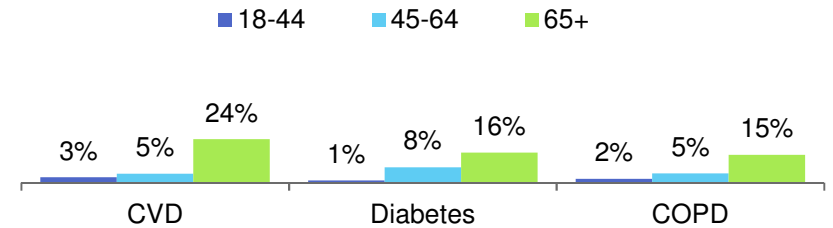
- Middlebury adults 65 and older are significantly more likely than those 18-64 to report cardiovascular disease and COPD.
- Adults 45 and older are also significantly more likely than those 18-44 to report diabetes.

There are no statistical differences by annual household income level in the prevalence of cardiovascular disease, diabetes, and COPD.

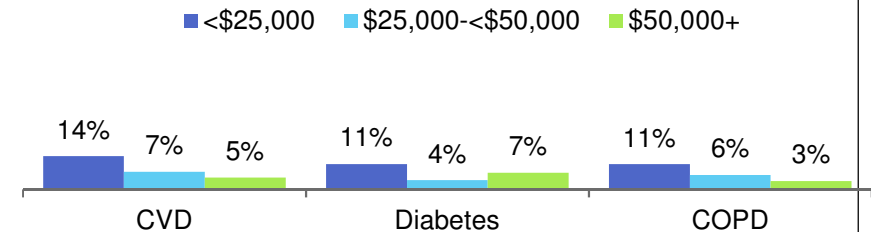
**Chronic Conditions by Gender
Middlebury Adults**



Chronic Conditions by Age



Chronic Conditions by Income Level



*Sample size is too small to report

Chronic Conditions

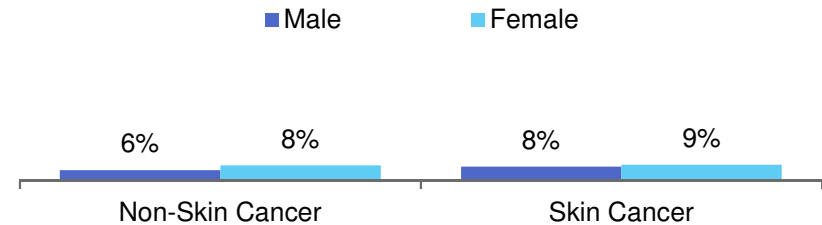
There are no statistical differences in reported rates of non-skin cancer or skin cancer among Middlebury area adults, by gender.

The prevalence of both non-skin cancer and skin cancers increases with increasing age.

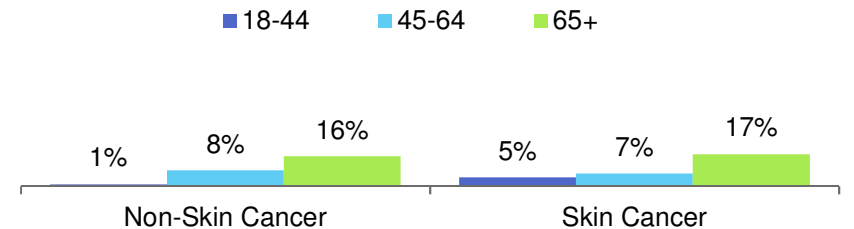
- Area adults 45 and older are significantly more likely than those 18-44 to report non-skin cancer.
- Adults 65 and older are significantly more likely than those 18-64 years of age to report having skin cancer.

Among Middlebury adults, there are no statistical differences in the prevalence of non-skin cancer or skin cancer by annual household income level.

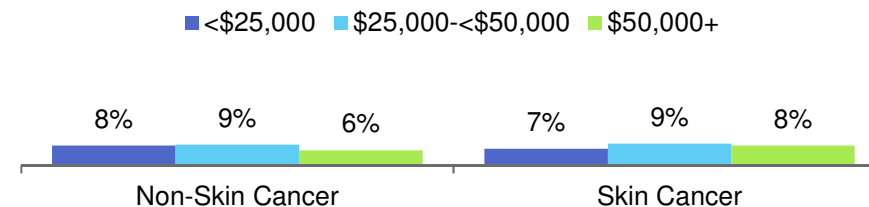
**Chronic Conditions by Gender
Middlebury Adults**



Chronic Conditions by Age



Chronic Conditions by Income Level



*Sample size is too small to report

Risk Behaviors

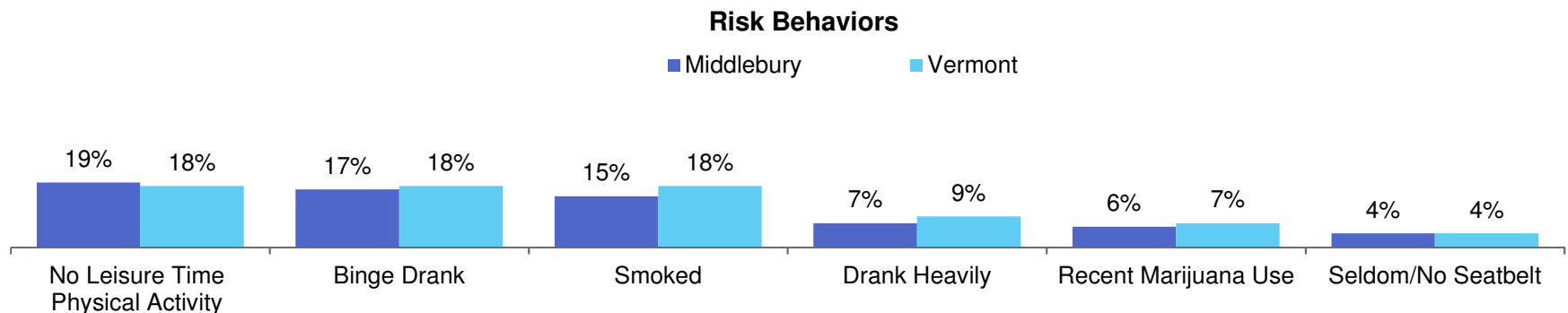
In 2013-2014, one in five (19%) Middlebury adults said they did not participate in any leisure time physical activity during the previous month. About one in six (17%) reported they binge drank in the last month, while seven percent heavily drank.

- Binge drinking was defined as five or more drinks in one sitting for men and four or more drinks for women. Heavy drinking was defined as more than two drinks per day for men and more than one for women.

Fifteen percent of Middlebury area adults said they currently smoke. Of smokers, 59% tried to quit in the last year.

Six percent or fewer each said they recently used marijuana (6%) and seldom or never wear a seatbelt when in a car (4%).

Middlebury area and Vermont adults had similar risk factor prevalence for all measures. Additionally, risk behavior prevalence has not changed significantly for any measure since 2011. See Appendix A for results over time.



Note: Smoking and exercise data are age adjusted to the U.S. 2000 standard population

Risk Behaviors

There are no statistically significant differences by gender among Middlebury area adults in smoking and not participating in leisure time physical activity.

Among adults in the Middlebury area, smoking rates decrease with increasing age.

- Adults 18-64 are significantly more likely to report smoking than those 65 and older.

Conversely, not participating in physical activity increases with increasing age.

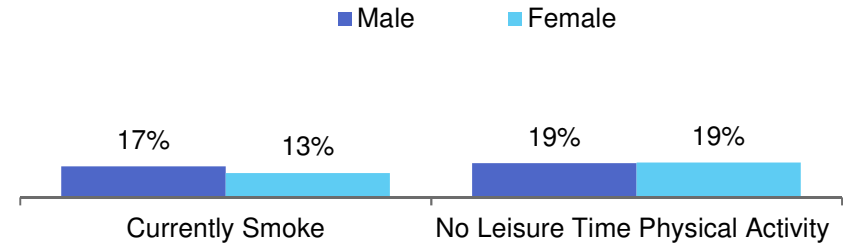
- Adults 65 and older are significantly more likely to not participate in physical activity than those 18-44.

Middlebury area adults in homes with more income are less likely to currently smoke.

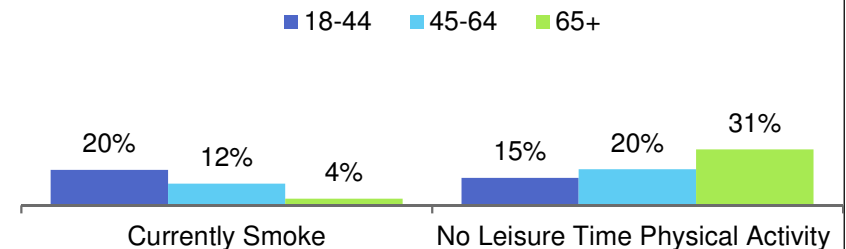
- Adults in homes making \$50,000 or more are significantly less likely to smoke than those with less income.

Not participating in physical activity is more likely among those with lower incomes, however differences are not statistically significant.

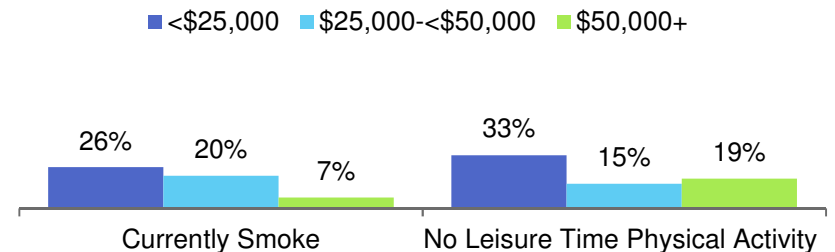
**Risk Behaviors by Gender
Middlebury Adults**



Risk Behaviors by Age



Risk Behaviors by Income Level



Note: Smoking and physical activity data, except that by age, are age-adjusted to the U.S. 2000 population.

Risk Behaviors

Middlebury area males are significantly more likely than females to binge drink (23% vs. 13%).

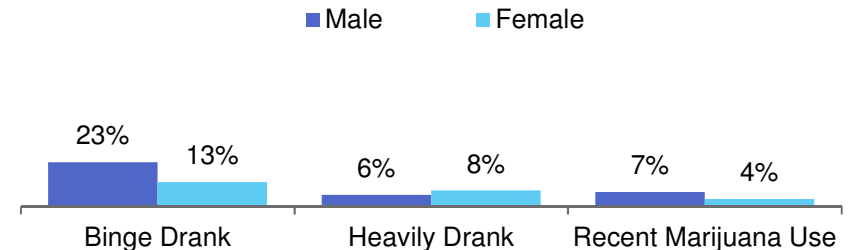
- There are no statistical differences in the rates of heavy drinking or marijuana use by gender among Middlebury adults.

Recent binge drinking, heavy drinking, and marijuana use all decrease as age increases.

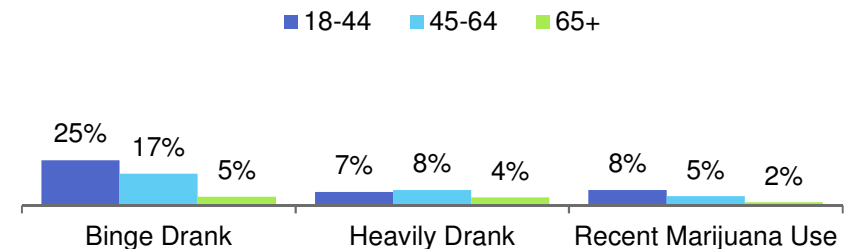
- Adults 65 and older are significantly less likely than younger adults to report binge drinking.
- Likewise, adults 65+ are also significantly less likely than those 18-44 to have used marijuana.
- Heavy drinking does not vary significantly by age.

There are no statistical differences by annual household income for binge drinking, heavy drinking, and recent marijuana use.

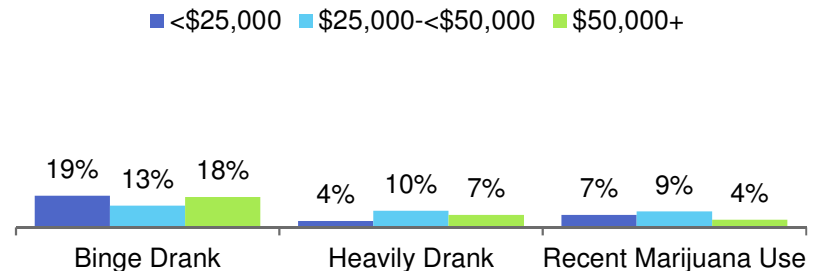
**Risk Behaviors by Gender
Middlebury Adults**



Risk Behaviors by Age



Risk Behaviors by Income Level



*Sample size is too small to report

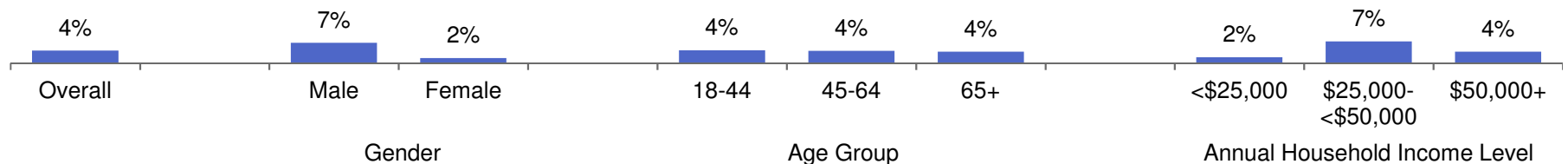
Risk Behaviors

Overall, less than one in twenty (4%) adults in the Middlebury area and Vermont overall said they seldom or never wear a seatbelt when riding or driving in a car.

Middlebury area men are more likely to seldom or never wear a seatbelt, however the difference is not statistically significant.

Adult non-use of seatbelts in the Middlebury area also does not differ by age or annual household income level.

**Seldom or Never Wear Seatbelt, Overall and by Sub-groups
Middlebury Adults**



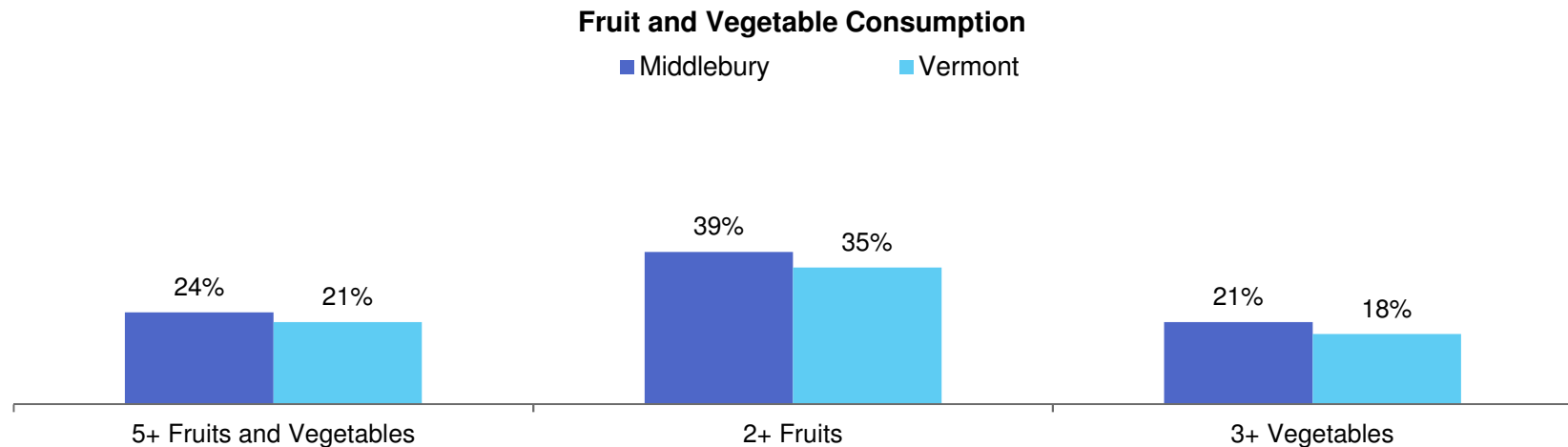
*Sample size is too small to report.

Preventive Behaviors

In 2011-2013, about a quarter of Middlebury area adults reported eating the recommended five or more fruit and vegetable servings per day. Roughly four in ten ate two or more fruits and 21% reported eating three or more vegetable servings.

Middlebury area adult consumption of fruits and vegetables was statistically similar to that among Vermont adults.

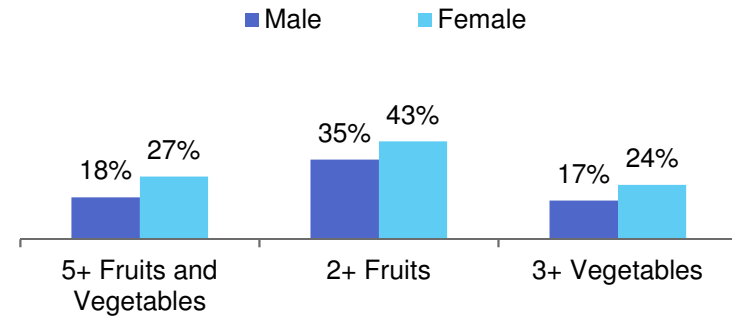
Fruit and vegetable consumption was only asked in 2011 and 2013. District Office level analyses require the combination of two years of data. As a result, changes over time could not be completed for this report.



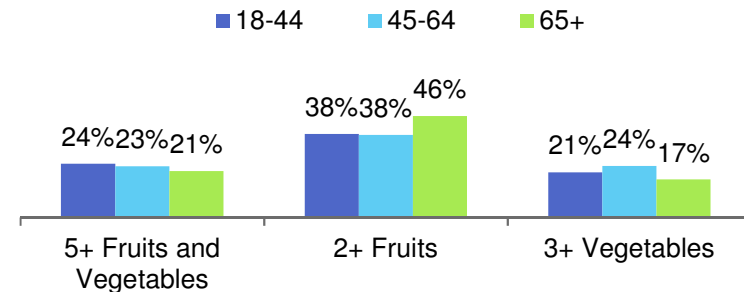
Preventive Behaviors

There are no significant differences in fruit and vegetable consumption by gender, age, or household income among Middlebury adults.

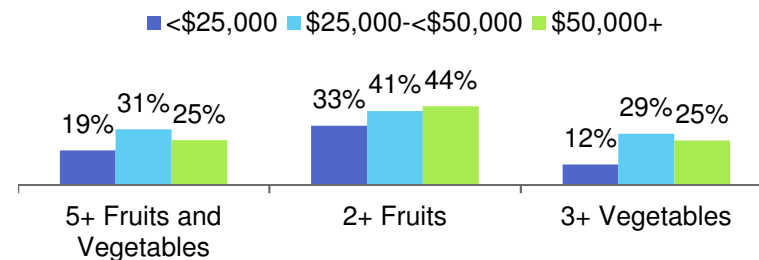
**Preventive Behaviors by Gender
Middlebury Adults**



Preventive Behaviors by Age



Preventive Behaviors by Income Level



Note: Fruit and vegetable data, except that by age are age adjusted to the U.S. 2000 standard population.

Preventive Behaviors

About six in ten (59%) Vermont adults reported meeting physical activity recommendations*. This is statistically similar to the 63% reported among Middlebury area adults.

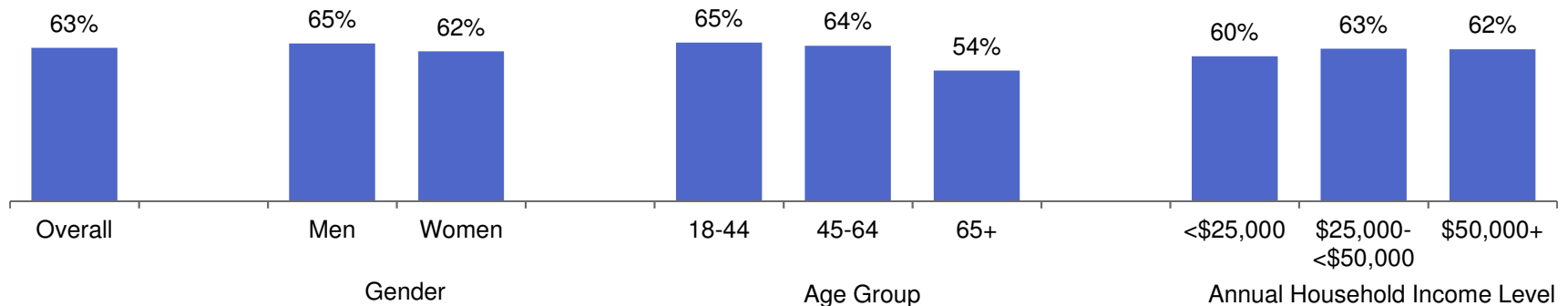
Men and women in the Middlebury area reported meeting physical activity recommendations at statistically similar rates, 65% for men and 62% for women.

Among Middlebury adults, meeting physical activity recommendations decreases with increasing age, however, there are no statistically significant differences.

There are also no significant differences in meeting physical activity recommendations by annual household income level.

Meeting physical activity recommendations information was only collected in 2011 and 2013. District Office level analyses require the combination of two years of data. As a result, changes over time could not be completed for this report.

**Met Physical Activity Recommendations, Overall and by Sub-groups
Middlebury Adults**



*For adults, the CDC currently recommends they participate in 150 minutes of moderate physical activity or 75 minutes of vigorous activity per week. Strength building activities are recommended at least two times per week. For more information see:

www.cdc.gov/physicalactivity/everyone/guidelines/index.html

Note: Met physical activity recommendation data, except that by age are age adjusted to the U.S. 2000 population.

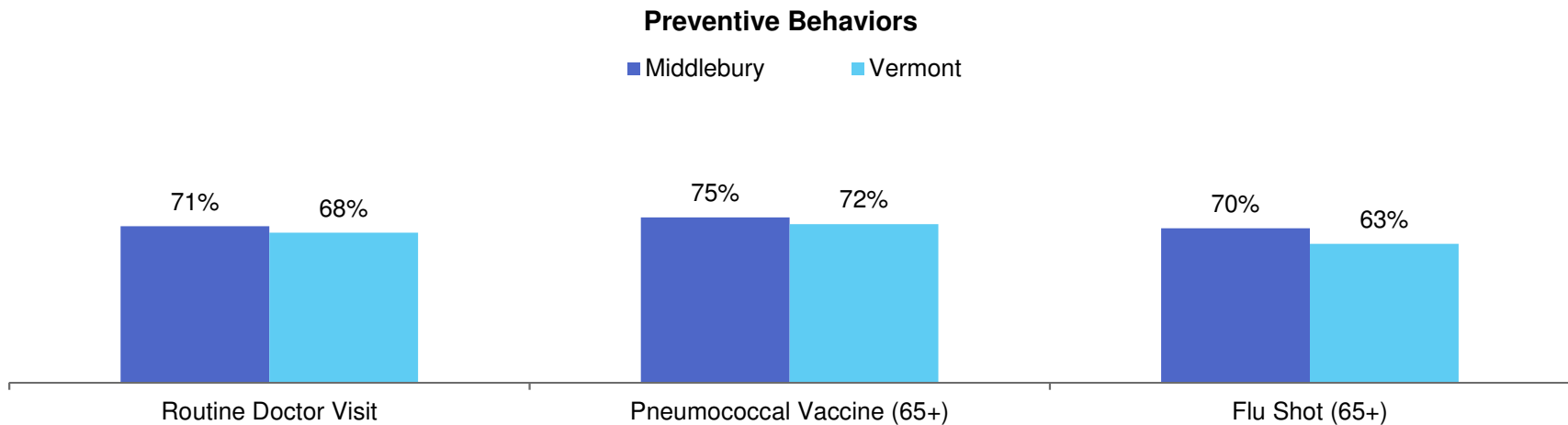
Preventive Behaviors

Seven in ten adults in the Middlebury area said they saw their doctor for a routine visit in the previous year. This is similar to the 68% reported among all Vermont adults.

Three quarters of Middlebury area adults ages 65 and older have ever received a pneumococcal vaccine. Slightly fewer, 70% reported having a flu shot in the last year.

- Vermont adults, ages 65 and older reported getting pneumococcal and flu shot vaccines at similar rates to Middlebury adults, 72% and 63%, respectively.

Routine doctor visits and receipt of vaccinations among Middlebury area adults have not changed since 2011. See Appendix A for results over time.



Preventive Behaviors

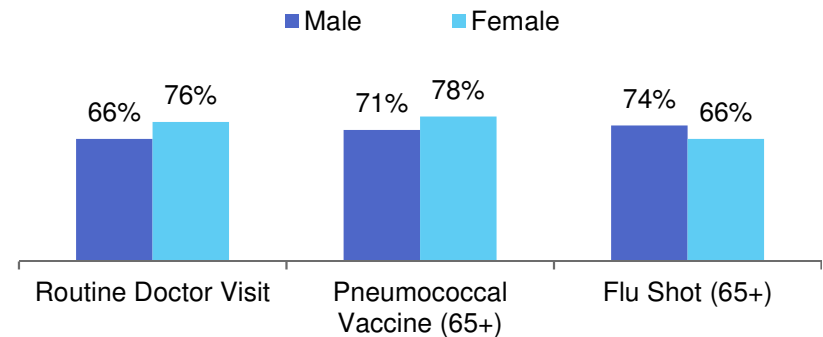
There are no statistical differences in routine visits to the doctor by gender, among Middlebury adults. Likewise, among adults 65 and older there are no differences in receipt of a pneumococcal vaccine or flu shot.

Routine visits to the doctor in the last year increase with age.

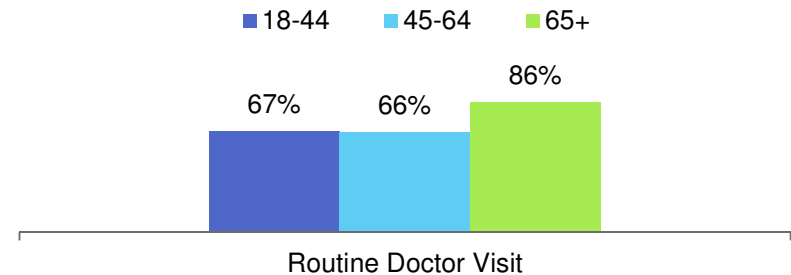
- Adults 65 and older are significantly more likely to visit their primary care physician over residents ages 18-64.

There are no differences by annual household income level in reported routine doctor visits and reported receipt of a pneumococcal vaccine or flu shot, among Middlebury area adults.

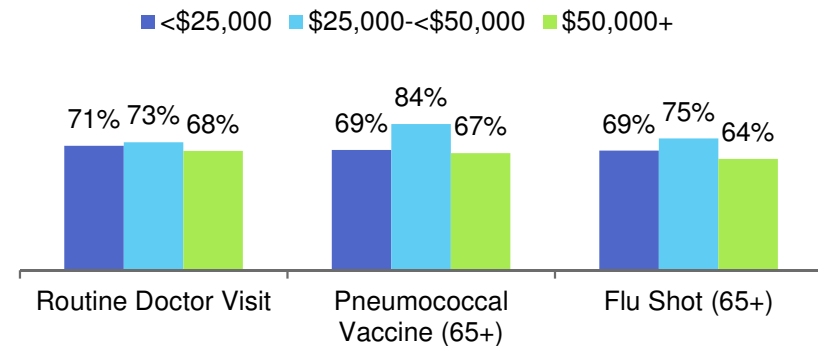
**Preventive Behaviors Gender
Middlebury Adults**



Preventive Behaviors by Age



Preventive Behaviors by Income Level

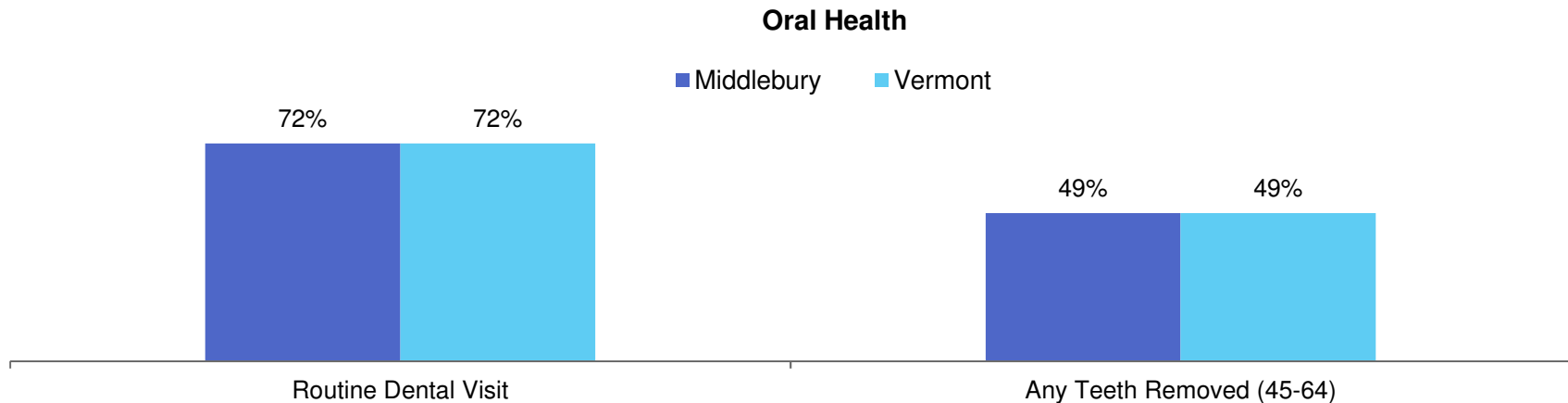


Oral Health

More than seven out of ten Middlebury adults reported visiting the dentist within the past year. Half said they have had one or more teeth extracted in their lifetime.

- Reported dental visits and teeth extractions are similar among Middlebury adults and Vermont adults overall.

Oral Health questions were only asked in 2012 and 2014. District Office level analyses require the combination of two years of data. As a result, changes over time could not be completed for this report.



Note: Routine dental visit data, are age-adjusted to the U.S. 2000 population.

Oral Health

There are no statistically significant differences by gender in routine dentist visits and teeth removal among Middlebury adults.

There are also no statistical differences in routine dental visits by age.

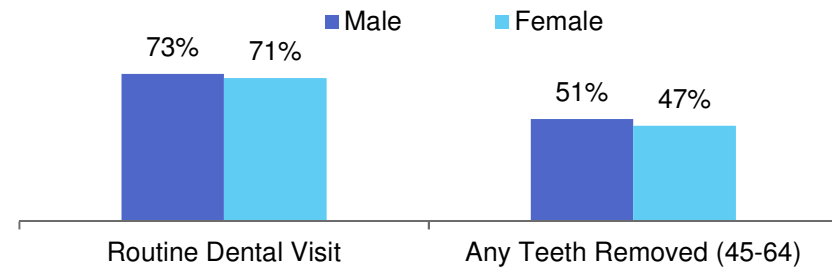
Routine dental visits increase with increasing annual household income.

- Adults in homes making \$50,000 or more are more likely than those in homes with less income to have seen a dentist in the last year.

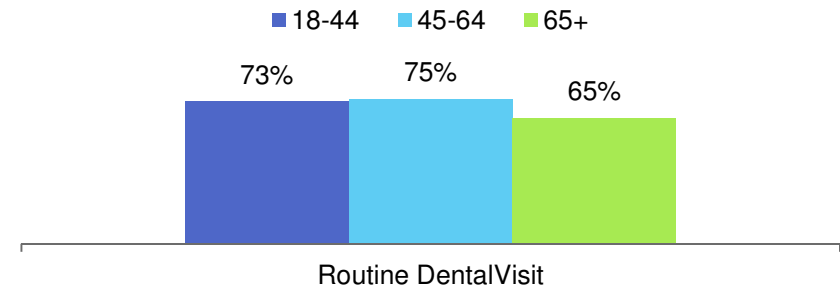
Having any teeth removed is less likely as annual household income increases.

- Those Middlebury area adults in homes making at least \$50,000 annual are significantly less likely than those in homes with less income to have had a teeth removed.

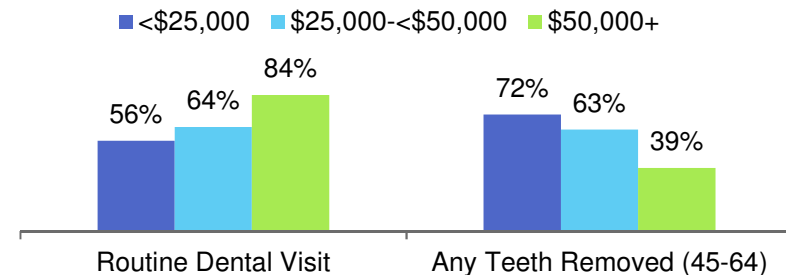
**Oral Health by Gender
Middlebury Adults**



Oral Health by Age



Oral Health by Income Level



Note: Routine dental visit data, except that by age, are age-adjusted to the U.S. 2000 population.

HIV Screening

In 2013-2014, less than three in ten (27%) Middlebury area adults had ever been tested for HIV. This is statistically similar to the 31% reported among Vermont adults overall.

Men and women in the Middlebury area report HIV testing at similar rates.

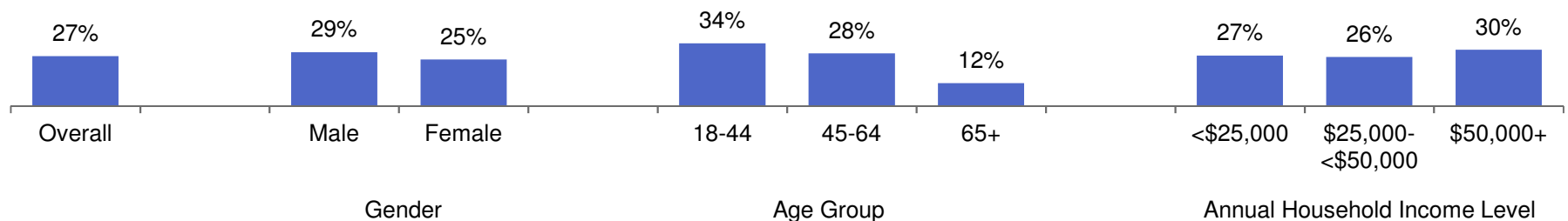
Ever having an HIV test decreases with increasing age. In other words, as adults age they are less likely to have had an HIV test.

- Adults 65 and older are significantly less likely to have ever been tested for HIV compared with younger adults.

There are no differences, among adults in the Middlebury area, in HIV testing by annual household income level.

HIV testing among Middlebury adults has not change significantly since 2011. See Appendix A for results over time.

**Ever Had HIV Test, Overall and by Sub-Groups
Middlebury Adults**



Cancer Screening

In 2012-2014, eight in ten women ages 50-74 in the Middlebury area reported meeting breast cancer screening recommendations. This is similar to the 79% among all Vermont women in this age group.

- The breast cancer screening recommendation is a mammogram every two years.

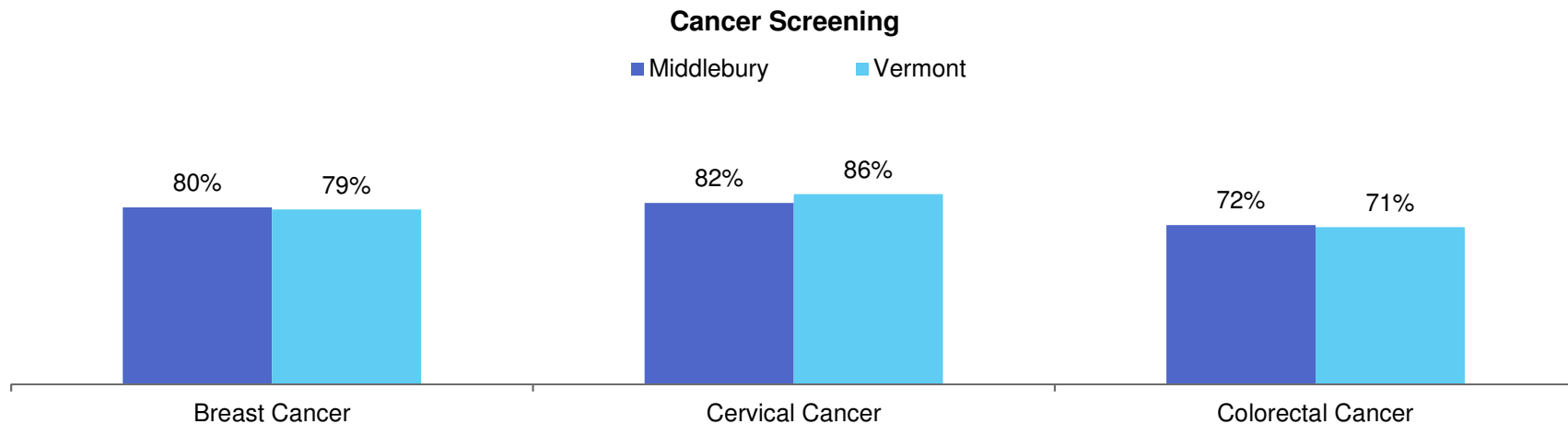
Eighty-two percent of women 21-65 who live in the Middlebury area met cervical cancer recommendations, statistically similar to the 86% among Vermont women of the same age.

- Cervical cancer screening recommendations are for a PAP test every three years, and excludes women who have had a hysterectomy.

Among adults 50 to 75 living in the Middlebury area, roughly seven in ten (70%) met colorectal cancer screening recommendations. This also is similar to the rate reported by all Vermonters of the same age (71%).

- Recommendations for screening for colorectal cancer are: a fecal occult blood test (FOBT) annually OR sigmoidoscopy ever five years and FOBT every three years OR colonoscopy ever ten years.

Recommended cancer screening questions were only asked in 2012 and 2014. District Office level analyses require the combination of two years of data. As a result, changes over time could not be completed for this report.



Note: Cancer screening data are age-adjusted to the U.S. 2000 population.

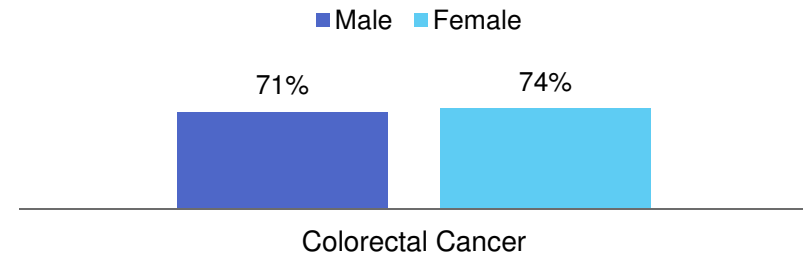
Cancer Screening

Among Middlebury area adults 50-75, receipt of colorectal cancer screening is similar by gender.

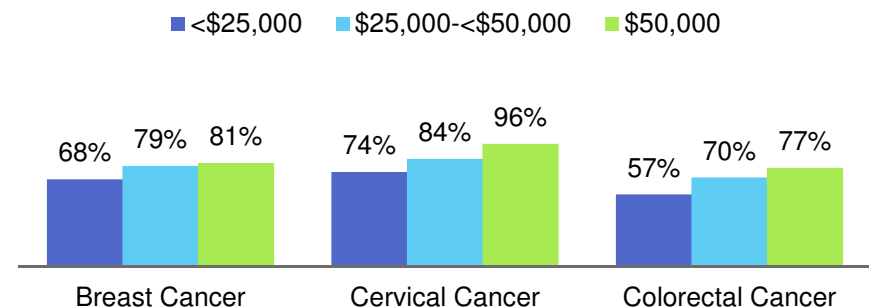
Middlebury area adults in homes with more income are more likely to receive cancer screening as recommended.

- Middlebury women 21-65 in homes making at least \$50,000 per year are significantly more likely to receive cervical cancer screening as recommended, compared with those in homes making less than \$25,000 annually.
- No other differences in cancer screening are statistically significant.

**Cancer Screening By Gender
Middlebury Adults**



Cancer Screening by Income Level



Note: Cancer screening data, except that by age, are age-adjusted to the U.S. 2000 population.

Appendix A: Middlebury District Office Trend Results (2011-2014)

Health Status Indicators	2011-2012	2012-2013	2013-2014	Significant Change Since 2011
Fair or Poor General Health	11%	10%	12%	No
Poor Physical Health	10%	9%	9%	No
Poor Mental Health	9%	7%	8%	No
Disabled	23%	21%	23%	No
Health Access Indicators	2011-2012	2012-2013	2013-2014	Significant Change Since 2011
No Personal Doctor	12%	12%	10%	No
No Doctor Because of Cost	9%	9%	8%	No
No Health Plan (ages 18-64)	12%	11%	8%	No
Chronic Conditions	2011-2012	2012-2013	2013-2014	Significant Change Since 2011
Arthritis	29%	26%	25%	No
Depression	21%	20%	21%	No
Obesity	25%	28%	28%	No
Asthma	10%	10%	14%	No
Diabetes	7%	7%	7%	No
Non-Skin Cancer	7%	6%	7%	No
Cardiovascular Disease (CVD)	6%	8%	8%	No
Skin Cancer	6%	7%	8%	No
Chronic Obstructive Pulmonary Disease (COPD)	4%	5%	6%	No

Appendix A: Middlebury District Office Trend Results (2011-2014)

Risk Behaviors	2011-2012	2012-2013	2013-2014	Significant Change Since 2011
Smoking	15%	16%	15%	No
Binge Drinking	17%	17%	17%	No
No Exercise	20%	20%	19%	No
Recent Marijuana Use	6%	6%	N/A	No
Heavy Drinking	8%	6%	7%	No
Seldom or Never use Seatbelt	5%	3%	4%	No
Preventative Behaviors	2011-2012	2012-2013	2013-2014	Significant Change Since 2011
Routine Doctor Visit, in Last year	64%	67%	71%	No
Pneumococcal Vaccine, Ever, Ages 65+	65%	68%	75%	No
Flu Shot in the Last Year, Ages 65+	64%	70%	70%	No
Ever Tested for HIV	28%	27%	27%	No

Additional Information

Contact the BRFSS Coordinator for additional information or for BRFSS data

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Additional sub-state level data can be found on the Vermont Department of Health website

<http://healthvermont.gov/hv2020/index.aspx>

The Vermont BRFSS Program would like to acknowledge the work of Joseph Allario, Vermont Department of Health intern, who was responsible for creating these reports.

Towns included in the Middlebury Health District are: Addison, Bridport, Bristol, Cornwall, Ferrisburg, Granville, Hancock, Leicester, Lincoln, Middlebury, Monkton, New Haven, Orwell, Panton, Ripton, Salisbury, Shoreham, Starksboro, Vergennes, Waltham, Weybridge, Whiting, and Buels Gore